AF/IFW

Attorney's Docket No.: 80398.P561 Patent

In re the Application of: Mark Kenneth Eyer
(inventor(s))

Application No.: 10/662,857

Filed: September 15, 2003

For: INFRARED REMOTE CONTROL COMMAND NETWORK PASS-THROUGH
(title)

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SIR: Transmitted herewith is a Response and Amendment for the above-referenced application.

X **No additional claim fee is required.**

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The fee has been calculated as shown below:

	(Col. 1) Claims Remaining After Amd.		(Col. 2) Highest No. Previously Paid For	(Col. 3) Present Extra	SMALL ENTITY Rate	SMALL ENTITY Additional Fee	OTHER THAN A SMALL ENTITY Rate	OTHER THAN A SMALL ENTITY Additional Fee
Total Claims	* 26	Minus	** 26	0	X25	$	X50	$ 0
Indep. Claims	* 4	Minus	*** 4	0	X100	$	X200	$ 0
☐ **First Presentation of Multiple Dependent Claim(s)**					**+180**	**$**	**+360**	**$**
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_____ A check in the amount of $_____ is attached for presentation of additional claim(s).

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__X__ **A check for $ 500.00 is attached for filing a brief in support of an appeal under 37 C.F.R. § 41.20.**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Mark Kenneth Eyer — Examiner: Shimizu, Matsuichiro

Serial No. 10/662,857 — Art Unit: 2612

Filed: September 15, 2003

For: INFRARED REMOTE CONTROL COMMAND NETWORK PASS-THROUGH

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Alexandria, VA 22313-1450

APPEAL BRIEF UNDER 37 C.F.R. §§ 41.31 AND 41.37

Sir:

Pursuant to a Notice of Panel Decision from Pre-Appeal Brief Review mailed March 8, 2007, in which the Panel determined that Appellant Proceed to the Board of Patent Appeals and Interferences, this is an appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner of Art Unit 2612, who in a Final Office Action mailed October 17, 2006 rejected claims 1-26 in the above-identified application. Appellant respectfully requests consideration of this Appeal Brief by the Board of Patent Appeals and Interferences and for allowance of these claims.

It is not believed that extensions of time are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. §1.136(a). Any fees required therefore are hereby authorized to be charged to Deposit Account No. 02-2666. Please credit any overpayment to the same deposit account.

I. Real Party in Interest

The application is assigned to Sony Electronics, Inc. of 1 Sony Drive, Park Ridge, New Jersey, 07656.

II. Related Appeals and Interferences

To the best of Appellant's knowledge, there are no prior or pending appeals, interferences, or judicial proceedings that may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. Status of the Claims

Claims 1-26 are pending in the application. Claims 1-26 are finally rejected.

Claims 1-18 and 20-26 are the subject of this appeal. A copy of claims 1-26 is set forth in the Claims Appendix.

IV. Status of Amendments

There have been no Amendments filed subsequent to the Final Office Action.

V. Summary of Claimed Subject Matter

The claims under appeal generally relate to allowing a remote control unit that is designed to control one audio/video device but not another audio/video device to control the second audio/video device. The remote control unit may transmit infrared pulse sequences across a wired or wireless home network to control the second audio/video device via the first audio/video device. If the first device does not recognize the data code sequence, the first device may generate a representation of the data code sequence, from sampling the data code sequence, for example, and may place the representation of the data code sequence on a bus so the second device may be controlled by the representation of the data code sequence and respond to messages appropriately. Claims 1, 14, and 22 are the independent claims under appeal.

Claim 1:

Claim 1 is directed to a system having a first device and a second device coupled to a transmission medium, and a remote control unit to control the second device. The remote control unit may transmit a data code sequence for the purpose of controlling the second device. The first device may include circuitry to generate a representation of the data code sequence if the first device does not recognize the data code sequence. The first device also may transfer the representation of the data code sequence to the transmission medium to control the second device.

An embodiment of a system according to claim 1 is depicted in Figures 1-4, which are described in Appellant's Specification at page 15, line 1 to page 16, line 21 (paragraphs **[0040]** – **[0046]**). The Specification provides that in one embodiment, a user pushes a button on the remote control unit 106 and the remote control unit 106 emits the optical signal 108 having the data code sequence 200. In one embodiment, the device 102 receives the optical signal 108 having the data code sequence 200 and determines whether the device 102 recognizes the data code sequence 200. If the device 102 does not recognize the data code sequence 200, the device 102 generates a representation 300 of the data code sequence 200 using the measurements (samples) of the data code sequence 200. In one embodiment, the device 102 transfers the representation 300 of the data code sequence 200 to the transmission medium 110 in FCP packets.

Claim 14:

Claim 14 is directed to a method that operates by receiving at a first device a data code sequence from a remote control unit. The data code sequence may be recognized by a second device for controlling the second device. The method operates further by generating a representation of the data code sequence using the first device if the data code sequence is not recognized by the first device and by transferring the representation of the data code sequence onto a transmission medium to control the second device.

An embodiment of a method according to claim to claim 1 is depicted in Figures 1-4, which are described in Appellant's Specification at page 15, line 1 to page 16, line 21 (paragraphs **[0040]** – **[0046]**). The Specification provides that in block 402, a user pushes a

button on the remote control unit 106 and the remote control unit 106 emits the optical signal 108 having the data code sequence 200. In block 404, the device 102 receives the optical signal 108 having the data code sequence 200. In block 406, it is determined the device 102 recognizes the data code sequence 200. If the device 102 does not recognize the data code sequence 200, control passes to block 408 in which the device 102 generates a representation 300 of the data code sequence 200. In block 410, the device 102 does not recognize the data code sequence 200 and thus generates a representation 300 of the data code sequence 200. In block 412, the device 102 transfers the representation 300 of the data code sequence 200 to the transmission medium 110 in FCP packets."

Claim 22:

Claim 22 is directed to apparatus having an optical receiver and a demodulator in communication with the optical receiver. The demodulator may demodulate an optical signal provided by the optical receiver and to recover a data code sequence from the optical signal. A processor may be in communication with the demodulator and may sample the data code sequence to generate a representation of the data code sequence from samples. A buffer may be in communication with the processor and may buffer the representation of the data code sequence to maintain a continuous transmission of the representation of the data code sequence to an input/output (I/O) interface. The I/O interface may convert the representation of the data code sequence into a format compatible with electrical characteristics of a transmission medium.

An embodiment of an apparatus according to claim 22 is depicted in Figures 1-3, which are described in Appellant's Specification at page 8, line 15 to page 11, line 13 (paragraphs **[0022]** – **[0029]**. The Specification provides that in one embodiment, the device 102 includes an optical receiver 120, a demodulator 122 to demodulate the signal 108 to recover the data code sequence 200, and a processor 124 to sample the data code sequence 200 and use the samples to generate a representation 300 of the data code sequence 200. The device 102 also includes a buffer 126 to buffer the representation 300 of the data code sequence 200 and to maintain a continuous transmission of the representation 300 of the data code sequence 200 to an I/O interface 126 (*i.e.*, without noticeable latency or delay). The I/O interface 126 is to convert the representation 300 of the data code sequence 200 into a format compatible with the electrical characteristics of the transmission medium 110.

VI. Grounds of Rejection to be Reviewed on Appeal

The grounds for rejection to be reviewed on appeal are:

(1) Whether claims 1-4, 6-7, and 14-16 are unpatentable under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,195,548 to Schultheiss et al. (hereinafter "*Schultheiss*");

(2) Whether claim 5 is unpatentable under 35 U.S.C. §103(a) as being obvious over *Schultheiss* in view of U.S. Patent No. 5,778,256 to Darbee (hereinafter "*Darbee*");

(3) Whether claims 8-10 are unpatentable under 35 U.S.C. §103(a) as being obvious over *Schultheiss* in view of U.S. Patent No. 6,111,677 to Shintani et al. (hereinafter "*Shintani*");

(4) Whether claims 11-13 and 17-18 are unpatentable under 35 U.S.C. §103(a) as being obvious over *Schultheiss* in view of *HAVi: Home Audio Video Interoperability* by Jussi Teirikangas of Helsinki University of Technology (hereinafter "*Teirikangas*");

(5) Whether claims 22-25 are unpatentable under 35 U.S.C. §103(a) as being obvious over *Shintani* in view of U.S. Patent No. 5,870,593 to Prunier et al. (hereinafter "*Prunier*"); and

(6) Whether claim 26 is unpatentable under 35 U.S.C. §103(a) as being obvious over *Shintani* in view of *Prunier* in further view of U.S. Patent No. 6,728,600 B1 to Contaldo et al. (hereinafter "*Contaldo*").

In the following discussion, reference is made to the Final Office Action mailed October 17, 2006.

VII. Argument

Rejection of Claims 1-4, 6-7, and 14-16 Under 35 U.S.C. §102(b)

In the Final Office Action, the Examiner rejected claims 1-4, 6-7, and 14-16 under 35 U.S.C. §102(b) as being anticipated by *Schultheiss*. Appellant respectfully submits that the rejection is improper and requests that the rejections be overturned.

The law requires that an Examiner support a rejection under 35 U.S.C. §102(b) by setting forth a *prima facie* case of anticipation. A claim is anticipated only if each and every element of the claim is found in a reference. (MPEP §2131 *citing Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987)). The identical invention must be shown in as

complete detail as is contained in the claim. Id. *citing Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989)).

The Examiner Has Improperly Characterized Schultheiss With Regard to Claim 1

In the Final Office Action, the Examiner states that *Schultheiss* teaches a system having a first and a second device coupled to a transmission medium and a remote control unit for controlling the second device, the remote control unit to transmit a data code sequence recognized by the second device and for the purpose of controlling the second device. The Examiner asserts further that *Schultheiss* teaches that the first device includes circuitry to generate a representation of the data code sequence ***if the data code sequence is not recognized by the first device*** and to transfer the representation of the data code sequence to the transmission medium to control the second device. Appellant respectfully disagrees with the Examiner's characterization of *Schultheiss*.

Schultheiss appears to be directed to using a remote control unit to control a personal computer and a television. *Schultheiss* describes at column 2, lines 26-30 that "the unified remote control transmits infrared television remote control commands to a television in response to user inputs. The unified remote control also transmits personal computer commands to the wireless communications transceiver in response to user inputs." The "unified television/personal computer/telephone wireless remote control" 50' commands control both the television 40 and the personal computer 12 (col. 2, lines 23-38 of *Schultheiss*). Appellant respectfully submits that this and other teachings in *Schultheiss* make it clear that the remote control unit 50' in *Schultheiss* controls ***both*** the personal computer 12, with keys 58 and 64, for example, and the television 40, with keys 58 and 62, for example.

Appellant respectfully submits that there is no need to have a contingent plan in case either the television 40 or the personal computer 12 does not recognize the signal from the remote control unit 50' in *Schultheiss* because the remote control 50' is already programmed to control both the television 40 and the personal computer 12. Accordingly, Appellant respectfully submits that the Examiner has improperly interpreted *Schultheiss* to teach a first device includes circuitry to generate a representation of a data code sequence if the data code sequence is not recognized by the first device.

The Examiner Has Improperly Equated a Single Element to Two Distinctly Claimed Elements With Regard to Claim 1

In the Final Office Action, the Examiner stated that *Schultheiss* discloses that TV command signal 70b is a representation of TV command signal 74a. Appellant respectfully submits that this is in error. *Schultheiss* at col. 7, lines 20-41 describe that the "television commands from keys 58 and 62 are communicated as UHF television commands 74a ... and transceiver 204 in the housing receives television remote control signals 70b. .... It will also be understood that TV commands 74a may be received directly by television interface 200 from remote control 50', rather than using personal computer 12 as an intermediary." Appellant respectfully submits that there is no teaching in *Schultheiss* that the television remote control signals 70b are anything other than a simple pass through of the television commands 74a. Appellant respectfully submits that there is no teaching in *Schultheiss* that the personal computer 12 performs any processing on the television commands 74a to transform the television commands 74a into something other than itself. The mere change in reference number is insufficient to support an assertion that a conversion from one format to another took place. Accordingly, there is no indication in *Schultheiss* that the television commands 70b are a representation of the television commands 74a and thus the Examiner has improperly equated the singular functionality to two separate and distinct elements.

Schultheiss Does Not Teach the Identical Invention of Claim 1

In the Final Office Action, the Examiner states that *Schultheiss* teaches a system having a first and a second device coupled to a transmission medium and a remote control unit for controlling the second device, the remote control unit to transmit a data code sequence recognized by the second device and for the purpose of controlling the second device. The Examiner asserts further that *Schultheiss* teaches that the first device includes circuitry to generate a representation of the data code sequence ***if the data code sequence is not recognized by the first device*** and to transfer the representation of the data code sequence to the transmission medium to control the second device. Appellant respectfully disagrees.

Appellant respectfully submits that *Schultheiss* does not teach "the first device comprising circuitry to generate a representation of the data code sequence ***if the data code sequence is not recognized by the first device***" (emphasis added) as recited in claim 1. In

Schultheiss, there is no need to generate a representation of the command signal 74a because the remote control 50' is programmed to control both the television 40 and the personal computer 12. Appellant respectfully submits that the personal computer 12 does not consider consequences of not recognizing commands from the remote control unit 50'and thus does not include circuitry to generate a representation of the command signal 74a because a user merely needs to press the appropriate keys to control the personal computer 12, the television 40, or the television interface 200 from the remote control unit 50'. Thus, *Schultheiss* does not teach "the first device comprising circuitry to generate a representation of the data code sequence if the data code sequence is not recognized by the first device" as recited by claim 1.

Appellant respectfully submits that Appellant only need demonstrate that one element of a *prima facie* case of anticipation is missing to establish that the Examiner has not met the initial burden. Appellant has shown that at least one element of claim 1 is not taught either expressly or inherently in *Schultheiss* and that *Schultheiss* fails to show the identical invention as included in claim 1. Appellant respectfully submits therefore that because the Examiner has failed to show that *Schultheiss* teaches the identical invention as recited in claim 1, the Examiner has failed to meet the burden of establishing a *prima facie* case of anticipation of claim 1 over the *Schultheiss*. Accordingly, Appellant respectfully requests that the rejection be overturned.

Claims 2-4 and 6-7 properly depend from claim 1, which Appellant respectfully submits is patentable. Accordingly, Appellant respectfully submits that claims 2-4 and 6-7 are patentable for at least the same reasons that claim 1 is patentable. (MPEP §2143.03 (citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)). Accordingly, Appellant respectfully requests that the rejections to claims 2-4 and 6-7 be overturned.

The Examiner Has Improperly Characterized Schultheiss With Regard to Claim 1

In the Final Office Action, the Examiner states that *Schultheiss* teaches a system having a first and a second device coupled to a transmission medium and a remote control unit for controlling the second device, the remote control unit to transmit a data code sequence recognized by the second device and for the purpose of controlling the second device. The Examiner asserts further that *Schultheiss* teaches that the first device includes circuitry to generate a representation of the data code sequence ***if the data code sequence is not recognized***

by the first device and to transfer the representation of the data code sequence to the transmission medium to control the second device. Appellant respectfully disagrees with the Examiner's characterization of *Schultheiss*.

Schultheiss appears to be directed to using a remote control unit to control a personal computer and a television. *Schultheiss* describes at column 2, lines 26-30 that "the unified remote control transmits infrared television remote control commands to a television in response to user inputs. The unified remote control also transmits personal computer commands to the wireless communications transceiver in response to user inputs." The "unified television/personal computer/telephone wireless remote control" 50' commands control both the television 40 and the personal computer 12 (col. 2, lines 23-38 of *Schultheiss*). Appellant respectfully submits that this and other teachings in *Schultheiss* make it clear that the remote control unit 50' in *Schultheiss* controls ***both*** the personal computer 12, with keys 58 and 64, for example, and the television 40, with keys 58 and 62, for example. Appellant respectfully submits that there is no need to have a contingent plan in case either the television 40 or the personal computer 12 does not recognize the signal from the remote control unit 50' because the remote control 50' is already programmed to control both the television 40 and the personal computer 12. Accordingly, Appellant respectfully submits that the Examiner has improperly interpreted *Schultheiss* to teach a first device includes circuitry to generate a representation of a data code sequence if the data code sequence is not recognized by the first device.

The Examiner Has Improperly Equated a Single Element to Two Distinctly Claimed Elements With Regard to Claim 14

In the Final Office Action, the Examiner stated that *Schultheiss* discloses that TV command signal 70b is a representation of TV command signal 74a. Appellant respectfully submits that this is in error. *Schultheiss* at col. 7, lines 20-41 describe that the "television commands from keys 58 and 62 are communicated as UHF television commands 74a ... and transceiver 204 in the housing receives television remote control signals 70b. .... It will also be understood that TV commands 74a may be received directly by television interface 200 from remote control 50', rather than using personal computer 12 as an intermediary." Appellant respectfully submits that there is no teaching in *Schultheiss* that the television remote control signals 70b are anything other than a simple pass through of the television commands 74a.

Appellant respectfully submits that there is no teaching in *Schultheiss* that the personal computer 12 performs any processing on the television commands 74a to transform the television commands 74a into something other than itself. The mere change in reference number is insufficient to support an assertion that a conversion from one format to another took place. Accordingly, there is no indication in *Schultheiss* that the television commands 70b are a representation of the television commands 74a and thus the Examiner has improperly equated the singular functionality to two separate and distinct elements.

Schultheiss Does Not Teach the Identical Invention of Claim 14

In the Final Office Action, the Examiner states that *Schultheiss* teaches a system having a first and a second device coupled to a transmission medium and a remote control unit for controlling the second device, the remote control unit to transmit a data code sequence recognized by the second device and for the purpose of controlling the second device. The Examiner asserts further that *Schultheiss* teaches that the first device includes circuitry to generate a representation of the data code sequence ***if the data code sequence is not recognized by the first device*** and to transfer the representation of the data code sequence to the transmission medium to control the second device. Appellant respectfully disagrees.

Appellant respectfully submits that *Schultheiss* does not teach "generating a representation of the data code sequence ***if the data code sequence is not recognized by the first device***" (emphasis added) as recited in claim 14. In *Schultheiss*, there is no need to generate a representation of the command signal 74a because the remote control 50' is programmed to control both the television 40 and the personal computer 12. Appellant respectfully submits that the personal computer 12 does not consider consequences of not recognizing commands from the remote control unit 50'and thus does not include circuitry to generate a representation of the command signal 74a because a user merely needs to press the appropriate keys to control the personal computer 12, the television 40, or the television interface 200 from the remote control unit 50'. Thus, *Schultheiss* does not teach "generating a representation of the data code sequence if the data code sequence is not recognized by the first device" as recited by claim 14.

Appellant respectfully submits that Appellant only need demonstrate that one element of a *prima facie* case of anticipation is missing to establish that the Examiner has not met the initial

burden. Appellant has shown that at least one element of claim 14 is not taught either expressly or inherently in *Schultheiss* and that *Schultheiss* fails to show the identical invention as included in claim 14. Appellant respectfully submits therefore that because the Examiner has failed to show that *Schultheiss* teaches the identical invention as recited in claim 14, the Examiner has failed to meet the burden of establishing a *prima facie* case of anticipation of claim 14 over the *Schultheiss*. Accordingly, Appellant respectfully requests that the rejection be overturned.

Claims 15-16 properly depend from claim 14, which Appellant respectfully submits is patentable. Accordingly, Appellant respectfully submits that claims 15-16 are patentable for at least the same reasons that claim 14 is patentable. Id. Accordingly, Appellant respectfully requests that the Examiner reconsider and remove the rejection to claims 15-16. Accordingly, Appellant respectfully requests that the rejections be overturned.

Rejection of Claims 22-25 Under 35 U.S.C. §103(a)

In the Office Action, the Examiner rejected claims 22-25 under 35 U.S.C. §103(a) as being unpatentable over *Shintani* in view of *Prunier*. Appellant respectfully submits that the rejection is improper and requests that the rejections be overturned.

To establish a *prima facie* case of obviousness, an Examiner must show that that there is some suggestion or motivation to modify a reference to arrive at the claimed invention, that there is some expectation of success, and that the cited reference teaches each and every element of the claimed invention. (MPEP §2143.) *citing In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

MPEP §2145 provides that any motivation to combine or modify reference teachings must be found in the prior art of record. For example, an Examiner may find the suggestion or motivation to combine teachings in a reference (e.g., a U.S. Patent, inherency), in common

knowledge in the art (i.e., well-known art), in established scientific principles, in art-recognized equivalents, or in legal precedent (e.g., admitted prior art). However an Examiner may not use an improper rationale for combining or modifying reference teachings. One such impermissible rationales is provided in MPEP §2143.01, which points out that ***a statement*** that modifications to the cited reference would have been well within the ordinary skill of the art at the time the claimed invention was made ***is insufficient*** to support an obviousness rejection. Support must be found in the references themselves.

The Examiner Has Improperly Used a Mere Statement To Support A Determination of Obviousness of Claim 22

In the Final Office Action, the Examiner states that *Shintani* teaches an optical receiver 122, buffer 124, and a cable I/O interface 126 coupled to an IEEE 1394 bus medium. The Examiner concedes that *Shintani* is silent on an optical receiver, a demodulator, and a processor to sample the data code sequence and to generate a representation of the data code sequence from samples to be stored in the buffer, but states that one of ordinary skill in the art recognizes that the output of the optical receiver, demodulator, and processor provide the same data stream to the buffer 124 and therefore the optical receiver 122 is an obvious combination of the optical receiver, demodulator, and processor. Appellant respectfully disagrees.

Appellant respectfully submits that the Examiner has not shown where *Shintani* teaches or fairly suggests that the output of an optical receiver, demodulator, and processor provide the same data stream to the buffer 124 and thus cannot use this asserted statement to support an obviousness rejection of claim 22. A mere statement is insufficient.

Shintani in View of Prunier Does Not Teach or Fairly Suggest Each and Every Element of Claim 22

Appellant respectfully submits that *Shintani* in view of *Prunier* does not teach each and every element of claim 22. Appellant respectfully submits and the Examiner concedes that *Shintani* fails to teach sampling the data code sequence and generating a representation of the data code sequence from the samples. Appellant respectfully submits that *Prunier* fails to make up for this deficiency. *Prunier* is clear that "Signals P, E, and S, produced by different parts of the generator ... signal E is obtained in a way similar to the way in which pulses are generated

by a conventional circuit... divider 10 supplies signal P for modulating signal E. The width of pulses I [in the signal S] is determined by programming a dividing rate N of divider 10. In the same way, frequency and duty cycle of signal E is programmable by the CPU." Thus, there is no teaching in *Prunier* that any of the signals P, E, or S is a representation of each other. Further, contrary to the Examiner's assertion, nowhere is it taught in *Prunier* that a data code sequence is "sampled." The term does not appear in *Prunier*.

Each Element of the Prima Facie Case of Obviousness Must Be Met

Appellant respectfully submits that the Examiner has failed to satisfy each criterion of the *prima facie* case of obviousness with respect to independent claim 22. Appellant only need to show that one prong of the *prima facie* case of obviousness is not met for the burden to remain with the Examiner. Appellant respectfully submits that the Examiner has not demonstrated at the very least that the references teach or suggest each and every element of the claimed invention. Accordingly, Appellant respectfully requests that the rejection to claim 22 be overturned.

Claims 23-26 properly depend from claim 22, which Appellant respectfully submits is patentable. Accordingly, Appellant respectfully submits that claims 23-26 are patentable for at least the same reasons that claim 22is patentable. Id. Accordingly, Appellant respectfully requests that the Examiner reconsider and remove the rejection to claims 23-26. Accordingly, Appellant respectfully requests that the rejections be overturned.

CONCLUSION

Appellant respectfully submits that the Examiner has failed to set forth a *prima facie* case of anticipation and/or obviousness with respect to the claimed invention because the Examiner has failed to show how the cited references teach each and every element of the claimed invention. Appellant therefore respectfully submits that the rejections of the claims under appeal were improper and request that the rejections be overturned.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

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Yuko Tanaka
Name of Person Mailing Correspondence

Y. Tanaka
Signature

April 4, 2007
Date

VIII. Claims Appendix

The pending claims as they stand on appeal are presented below.

1. (Original) A system, comprising:

a first device coupled to a transmission medium;

a second device coupled to the transmission medium; and

a remote control unit for controlling the second device, the remote control unit to transmit a data code sequence, the data code sequence recognized by the second device, the data code sequence for the purpose of controlling the second device,

the first device comprising circuitry to generate a representation of the data code sequence if the data code sequence is not recognized by the first device, and to transfer the representation of the data code sequence to the transmission medium to control the second device.

2. (Original) The system of claim 1, wherein the first device is coupled to broadcast the representation of the data code sequence on the transmission medium.

3. (Original) The system of claim 1, wherein the remote control unit is coupled to transmit the data code sequence on an infrared (IR) carrier.

4. (Original) The system of claim 3, wherein the remote control unit is an infrared (IR) keyboard.

5. (Original) The system of claim 4, wherein the remote control unit is personal digital assistant (PDA).

6. (Original) The system of claim 1, wherein the representation of the data code sequence is measurement of data code sequence waveform.

7. (Original) The system of claim 1, wherein the transmission medium is compatible with a wired or wireless protocol.

8. (Original) The system of claim 7, wherein the transmission medium is an IEEE 1394 Serial Bus.

9. (Original) (Original) The system of claim 7, wherein the transmission medium is compatible with an Ethernet protocol.

10. (Original) The system of claim 7, wherein the transmission medium is twisted pair.

11. (Original) The system of claim 1, wherein the first device is to include the representation of the data code sequence in an audio-video control (Function Control Protocol (AV/C FCP) packet and to transmit the FCP packet having the representation of the data code sequence to the second device only.

12. (Original) The system of claim 1, wherein the first device is to include the representation of the data code sequence in a Function Control Protocol (FCP) packet and broadcast the FCP packet having the representation of the data code sequence on the transmission medium to all devices on the network.

13. (Original) The system of claim 1, wherein the first and second devices are audio/video devices.

14. (Previously Presented) A method, comprising:

receiving at a first device a data code sequence from a remote control unit, the data code sequence recognized by the second device for controlling a second device;

generating a representation of the data code sequence using the first device if the data code sequence is not recognized by the first device; and

transferring the representation of the data code sequence onto a transmission medium to control the second device.

15. (Original) The method of claim 14, further comprising transferring the data code sequence on a modulated carrier.

16. (Original) The method of claim 15, further comprising demodulating the modulated carrier.

17. (Original) The method of claim 14, further comprising including the representation of the data code sequence in a audio-video control Function Control Protocol (AV/C FCP) packet and broadcasting the FCP packet having the representation of the data code sequence on the transmission medium.

18. (Original) The method of claim 14, further comprising including the representation of the data code sequence in a Function Control Protocol (FCP) packet and addressing the FCP packet having the representation of the data code sequence to the second device only.

19. (Previously Presented) A system, comprising:

a first device coupled to a transmission medium;

a second device coupled to the transmission medium;

a remote control unit for controlling a third device, the remote control unit to transmit a data code sequence on a carrier, the data code sequence recognized by and for controlling the third device,

the first device comprising circuitry to measure the data code sequence, to generate a representation of the data code sequence from measurements, and to transfer the representation of the data code sequence to the transmission medium,

the second device comprising circuitry to translate the representation of the data code sequence back to the data code sequence and to transfer the data code sequence to the third device to control the third device.

20. (Original) The system of claim 19, wherein the remote control unit is an infrared (IR) keyboard.

21. (Original) The system of claim 20, wherein the first and third devices are audio/video devices.

22. (Original) An apparatus, comprising:

an optical receiver;

a demodulator in communication with the optical receiver, the demodulator to demodulate an optical signal provided by the optical receiver and to recover a data code sequence from the optical signal;

a processor in communication with the demodulator, the processor to sample the data code sequence and to generate a representation of the data code sequence from samples;

a buffer in communication with the processor, the buffer to buffer the representation of the data code sequence to maintain a continuous transmission of the representation of the data code sequence to an input/output (I/O) interface; and

an I/O interface in communication with the buffer, the I/O interface to receive the representation of the data code sequence and to convert the representation of the data code sequence into a format compatible with electrical characteristics of a transmission medium.

23. (Original) The apparatus of claim 22, wherein the processor is further to sample binary data bits in a message/command in the data code sequence.

24. (Original) The apparatus of claim 22, wherein the demodulator is further to remove an amplitude modulated carrier having a frequency in a range of typically thirty kilohertz (kHz) to sixty kHz, or a narrower range, to recover the data code sequence.

25. (Original) The apparatus of claim 24, wherein the processor is further to generate the representation of the data code sequence in the form of a list of the samples.

26. (Original) The apparatus of claim 24, wherein the I/O interface is further to insert a representation of the data code sequence in an Internet protocol (IP) packet.

IX. Evidence Appendix

Appellant makes no reference to evidence.

X. Related Proceedings Appendix

To the best of Appellant's knowledge, there are no prior or pending appeals, interferences, or judicial proceedings that may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.